Work Order ID 46409-5 SPLIT

June 26, 2009 11:50:47 AM

Item ID: D6101-001
Revision ID: A
Item Name: Saddle Billet

Accept

Setup Start
Stop

Start Date: 15/07/2009 **Start Qty:** 300.00 150
Required Date: 03/08/2009 **Req'd Qty:** 300.00

Cust Item ID:
Customer:

Reference:

Run Start
Stop

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D6101	Rev A								
100		0.00							
Purchasing	PURCHASING								
Purchasing	**Memo**	0.00							
	Issue P/O: 8393 □a)Description: Alluminum billet□b) 6.00" x 6.250" x 2.00" thick□c) Tolerance on length are +0.025"/-0.000"Æ+/-0.008"□d) Grain direction along 6.00" length □e) Material: 7075-T7351 (QQ-A-250/12) □ f)Material certification required								
110	Receive & Inspect for Damage & Mat'l Certs	0.00							
Packaging									
Packaging	**Memo**	0.00							
	Ensure material certification is attached								

CL 09/10/23

CL 9/11/11 (10)

Work Order ID 46409

June 26, 2009 11:50:47 AM

Item ID: D6101-001
Revision ID: A
Item Name: Saddle Billet

Accept

Setup Start
Stop

Start Date: 15/07/2009 **Start Qty:** 300.00
Required Date: 03/08/2009 **Req'd Qty:** 300.00
Reference:

Cust Item ID:
Customer:

Run Start
Stop

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 QC Quality Control	QC6- Inspect dimensions to drawing	0.00				10			
	Memo Ensure Material certification comply to Dwg D	0.00							
130 Packaging Packaging	Identify as per dwg & Stock Location: MAT	0.00				10			
	Memo	0.00							
140 QC Quality Control	QC21- Final Inspection - Work Order Release	0.00							
	Memo	0.00							

09/11/13

MF 09-11-12

Picklist Print

June 26, 2009 11:29:29 AM

Work Order ID: 46409

Parent Item: D6101-001RevA

Parent Item Name: Saddle Billet

Comments:

Start Date: 15/07/2009 **Required Date:** 03/08/2009

Start Qty: 300.00 **Required Qty:** 300.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D6101-001PRevA		Purchased	No			110	Each	0.0000	300.0000			

7075-T7351 2X6X6.25

9/11/11 (10)

Castle Metals®

A. M. Castle & Co.

PACKING SLIP

Pack Slip No:6025354

Ship From:	Sold To:	Ship To:	Deliver To:
Castle Metals MONTREAL 835-SELKIRK AVENUE POINTE CLAIRE, QUEBEC H9R 3S2	DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7	DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7	DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA

Date Shipped	F.O.B.	Freight Terms	Carrier	BOL No	Delivery No
10-NOV-09	ORIGIN	Prepaid	MANITOULIN	120110-2	6025354

Shipment Details — **Final Destination Branch** - MON

Order No	Line No	Item No	Description
369825	1	6857.MO	2.0000.PL.7075.T7351.ALUMINUM.48.5000.144.5000 CUT 2SIDED TO 6.25 IN (+ .0310/- .0000 IN (GRAIN TO RUN ALONG 6")) X 6 IN (+ .0310/- .0000 IN (GRAIN TO RUN ALONG 6")) - ALUMINUM PLATE SAW

Purchase Order No	Part Number	Ordered Qty	Invoice Qty	Backorder Qty
8393		10 PCS	10 PCS	

Details

Mill	Heat Number	Mech Id	PCS	Width (IN)	Length (IN)	Shipped Qty (LBS)
	456750A9		10			75.79

These commodities/technologies are subject to US Export Administration & US State Dept. Regulations and, if intended for export, were/are exported thereunder. Diversion contrary to US Law is Prohibited.

We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

This material has been received and inspected by: _____ Date: _____

09/11/12

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
414944J

Lot: 456750A9 Cast 198 Drop 20 Ingot 1

(ASTM E8/B557)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	73.1 : 73.7 (504 : 508)	62.7 : 63.4 (432 : 437)	11.9 : 12.1

(ASTM E1004)

Conductivity %IACS :	41.8 Min	42.2 Max
(MS/M) :	24.2 Min	24.5 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR		OTHER
Actual	0.05	0.22	1.4	0.02	2.4	0.20	5.7	0.03	0.01	0.01	TOT	0.05

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder

TEST NOTES

7075-T7351 plate 3.001-3.500" thick, if ultrasonically inspected, meets requirements of CMMP025 per SDR CMMP025-KaiserT-1. 7075-T7351 plate 3.501-6.000" thick, if ultrasonically inspected, meets requirements of CMMP025 per SDR CMMP025-KaiserT-2.

Metal represented by this test report was immersion ultrasonically tested from one side and meets the Class A and Class B requirements of all specifications referenced on this test report.

CASTLE METALS CORP.
DATE RCVD 12/14/06
IAC
APPROVED BY

CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED IN THE UNITED STATES OF AMERICA OR A QUALIFYING COUNTRY PER DFARS 225.872-1(d). WAS MANUFACTURED IN THE UNITED STATES OF AMERICA, AND MEETS THE REQUIREMENTS OF DFARS 252.225 FOR DOMESTIC CONTENT. THIS MATERIAL HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF KAISER ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THIS CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED.

BILL POYNOR, LABORATORIES SUPERVISOR

SHIP TO:
A M CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

SOLD TO:
AM CASTLE & CO- SOLD TO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

KAISER ALUMINUM
Trentwood Works - Spokane, WA 99216
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4149447

CUSTOMER PO NUMBER:	WORK PACKAGE:	CUSTOMER PART NUMBER:	SHIP RUN/LOAD ID:	GOV'T CONTRACT NUMBER:
01-15905		6857 A97075-60	101432/16	

KAISER ORDER NO:	LINE ITEM:	SHIP DATE:	ALLOY:	CLAD:	TEMPER:	PRODUCT DESCRIPTION:
1075544	1	11-DEC-2008	7075	BARE	T7351	MILL FINISH PLATE

WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:	GAUGE:	WIDTH:	LENGTH:
5732 LB	4 PCS EST.	2020668	2.0000 IN	48.500 IN	144.500 IN

Certified Specifications

AMS 4078/RevG
ASTM B 209/Rev07
BSS 7056/RevA
DPS 4.713/RevAH
GS816100/RevG/Amd1
AMS-QQ-A-250/12
ASTM B 594/Rev06
CMMP 025/RevR
EAC MS1011/RevE
MMS 159/RevN
AMS-STD-2154
BAC 5439/RevH
CSTI 006/RevC
GAMPS 9101/RevB
PS 21211/RevK

Test Code: 4297

Test Results

Lot: 456514AB **Cast** 198 **Drop** 21 **Ingot** 1

(ASTM E8/B557)

	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
Tensile:	T7351	LT / 2 (Min:Max)	73.2 : 73.8 (505 : 509)	63.6 : 64.9 (439 : 447)	11.6 : 11.8

(ASTM E1004)

Conductivity %IACS :	41.2 Min	41.7 Max
(MS/M) :	23.9 Min	24.2 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR		OTHER
Actual	0.08	0.21	1.5	0.03	2.4	0.19	5.7	0.03	0.01	0.01	TOT	0.05

09/11/12